

MECHANICAL ENGINEERING GRADUATES OF NORTHWEST SAMAR STATE UNIVERSITY ITS EMPLOYABILITY AND BOARD PASSERS

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ABSTRACT

This study aimed to find out the mechanical engineering graduates of Northwest Samar State University its employability and board passers. Descriptive-evaluative research method was employed in data gathering to evaluate the respondents. Frequency counts and percentages were to analyze the data gathered.

The employment record of mechanical engineering graduates from 2000-20008, shows that Bachelor of Science in Mechanical Engineering (BSME) graduates of Northwest Samar State University, Calbayog City, Samar, Philippines, bears the good reputation and employable both in abroad and local employments.

The performance in the Mechanical Engineering Licensure Examination of the mechanical engineering graduates of Northwest Samar State University from school-year 2000-2008. Results shows that from school-year 2001-2007 the result of the percentage passed is good with a higher passing percentage of 75% both from April and October 2006 were all of the examinees of mechanical engineering graduates of Northwest Samar State University took their review classes and the lowest passing percentage of 25% in April 2007 were based on the data gathered that only one (1) took the review and luckily passed the said licensure examination. Result also shows that no one pass the licensure examination both from April and October 2008 were based on the data gathered that April 2008 examinees have not enrolled for a formal review classes and October 2008 examinees to enroll in the review classes conducted by the review centers.

KEYWORDS: *Mechanical Engineering Graduates, Employability, Board Passers*

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INTRODUCTION

Background

Based on statistics from both the academe and industry, mechanical engineering is still one of the most popular and in-demand fields of engineering graduates per field, civil and mechanical engineering are about at par and next in popularity to electrical engineering in countries such as Australia, Japan, New Zealand, Papua New Guinea, Philippines, and Singapore. The U.S. Bureau of labor statistics reports that mechanical engineering is the second largest of the engineering discipline.

Philippine produces 23,000 engineering graduates every year which is too far too many than what is presently needed by our economy, the prospect of employment in the ASEAN region is very bright considering that one of APEC's agenda is the mutual recognition of engineering qualifications.

Table 1: Number of B.S. Graduates Per Field (UP-NEC Statistics)

Country/Courses	CE	ME	EE	ChE	Env	Other	Total
Australia	1154	809	1604	276		1301	5144
Japan	17885	18487	26187	9878		15109	88266
New Zealand	114	128	129	46	800	14	461
Papua New Guinea	16	18	17	0	150	10	61
Philippines	6000	3500	7200	1000		5150	23000
Singapore	222	537	706	51		0	1516

The above figures then should be made engineering educators reflect about the kind of mechanical engineering education and training they provide to their students. Are they producing globally competitive engineers or contributing to the 30% engineering graduates doing technologists work based on the National Engineering Center survey of some 4000 engineers in 70 companies? It is in this light that the following considerations should be taken into account in re-engineering mechanical engineering education to address the concerns of the 21st century global community.

The mechanical engineer has been called the general practitioner and the jack-of-all trades among engineering professions. This is because he requires education and skills that span a broad range of technical, social, environmental, and economic problems. In general, however, the mechanical engineer is concerned with controlling the principles of motion, energy, and force through mechanical solutions. A mechanical engineer designs the tools and process used for satisfying the needs of society through a combinations of material, human, and economic resources. She might work on electric generators, internal combustion engines, steam and gas turbines, and other power-generating machines. She might also develop machines such as refrigeration and air-conditioning equipment, power tools, and other power-using machines.

Northwest Samar State University, Calbayog City, Samar, Philippines offers Bachelor of Science Mechanical Engineering in 1984 and the first Batch graduated in 1989, and took the Mechanical Engineers Licensure Examinations in October in the same year and out of 8 examinees 6 passed which accounted for 75%. Because of the good result in the said Licensure Examination TTMIST had been the talk of the town for the Engineering courses like Mechanical Engineering. This study aimed to find out the employability and board passers of Northwest Samar State University, Calbayog City graduates taking up Bachelor of Science in Mechanical Engineering (BSME) from School Year 2000-2008

METHODS

To achieve the objective, this study utilizes mainly the descriptive-evaluative method of research is used in the study since a survey design is deemed appropriate to identify the extent of performance profile of mechanical engineering graduates of Northwest Samar State University. The result of the survey were analyzed in order to verify said extent and level performance.

The respondents of this study were the mechanical engineering graduates of Northwest Samar State University school year 2000-2008.

RESULTS

Table 2: Employment Records of BSME Graduates of Nw SSU School Year 2000-2008

School Year Graduated	Number of Graduates	Employment				Percentage			
		OFW	Gov't	Private	Self-Employed	OFW	Gov't	Private	Self-Employed
2000-2001	7	4	0	3	0	57.14	0	42.86	0
2001-2002	7	2	1	4	0	28.58	14.29	57.13	0
2002-2003	17	6	1	10	0	35.29	5.88	58.83	0
2003-2004	6	2	0	3	1	33.33	0	50	16.67
2004-2005	17	9	0	7	1	52.94	0	41.17	5.98
2005-2006	9	2	0	7	0	22.22	0	77.78	0
2006-2007	4	0	1	3	0	0	25	75	0
2007-2008	8	0	0	6	2	0	0	75	25

Table 2 shows the employment record of BSME Graduate of NwSSU from school-year 2000-2008, for school-year 2000-2001 out of seven (7) BSME graduates, four (4) work as OFW (Overseas Filipino Workers) which accounted for 57.14% and three (3) work in private firm in Luzon which accounted for 42.86%. For school-year 2001-2002 out of seven (7) graduates, two (2) work as OFW which accounted for 28.58%, one (1) in the government as policeman which accounted for 14.29% and four (4) in the private firm in Luzon which accounted for 57.12%. And for the school-year 2002-2003 out of seventeen (17) graduates, six (6) work as OFW which accounted for 5.88%, and ten (10) in the private firm in Luzon which accounted for 58.83%, for school-year 2003-2004 out of six (6) graduates, two (2) work as OFW which accounted for 33.33%, and three(3) in the private firm in Cebu and Manila which accounted for 50%, and one (1) as self-employed in Calbayog City which accounted for 16.67%. For school-year 2004-2005 out of seventeen (17) graduates, nine (9) work as OFW which accounted for 52.94%, seven (7) in the private firm all in Luzon which accounted for 41.17%, and one (1) self-employed in Calbayog City which he owned a motorized tricycle which accounted for 5.98%, for school-year 2005-2006 out of nine (9) graduates , two (2) work as OFW in the Middle East which accounted for 22.22%, and seven (7) in the private firm in Luzon which accounted for 77.78%. For school-year 2006-2007 out of four (4) BSME graduates, one (1) works in the government which accounted for 25%, and three (3) in the private company in Luzon which accounted for 75%, for school-year 2007-2008 out of eight (8) BSME graduates., six work in the private in Luzon which accounted for 75%, and two (2) self-employed which accounted for 25%. It implies that Bachelor of Science in Mechanical Engineering (BSME) graduates of Northwest Samar State University (NwSSU), Calbayog City bears the good reputation and employable both in abroad and local employments.

Table 3: Performance in the Mechanical Engineers Licensure Examination of the BSME Graduates of NWSSU School-Year 2000-2008

Schedule	Number of		Percentage Passed
	Examinees	Passers	
October 2001	3	2	66.67%
October 2002	5	2	40%
October 2003	10	4	40%
October 2004	3	1	33.33%
October 2005	8	3	37.5%
April 2006	4	3	75%
October 2006	4	3	75%
April 2007	4	1	25%

Table 3: contd.,			
October 2007	3	1	33.33%
April 2008	2	0	0%
October 2008	5	0	0%

Table 3 shows the performance in the Mechanical Engineers Licensure Examination of the BSME Graduates of NwSSU from school-year 200-2008. It can be gleaned from table that from school year 2001-2007 the result of the percentage passed is good with a higher passing percentage of 75% both from April and October 2006 were all of the examinees of BSME graduates of NwSSU took their review classes and the lowest passing percentage of 25% in April 2007 were based on the data gathered only one (1) took the review classes and luckily passed the said licensure examination. It can also be gleaned in the table that no one pass the licensure examination both from April and October 2008 were based on the data gathered that April 2008 examinees have not enrolled for a formal review classes and October 2008 examinees only two (2) took the review classes. It implies that there is really a need for examinees to enroll in the review classes conducted by the review centers.

CONCLUSIONS

- Based on the findings of this study, the following conclusions are drawn:
- In terms of employability the BSME graduates from school year 2000-2008, twenty five (25) work as OFW which accounted for 33.33%, forty-three (43) work in a different private companies in Cebu and in Luzon which accounted for 33.33%, three (3) in the government which accounted for 5.3%.
- In terms of performance profile of the BSME graduates of NwSSU in Licensure Examination the result is satisfactory in fact there are times were the School passing percentage is higher than the National passing percentage like the Examinations on October 2001, April 2006 and October 2006.
- Based on the data gathered here are some of the problems met by the BSME graduates in terms of; employment, they lack some of the technical know-how or skills, therefore there is a need to procure some needed equipment or apparatus, (b) taking the board examination, lack of the financial support from their parents and relatives so they took licensure without review classes.

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